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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/807,110 | 03/24/2004 | Chang-Hsuan Chiu | MR1683-534 | 2524 |

4586 7590 05/09/2005

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ELLICOTT CITY, MD 21043

EXAMINER

OMGBA, ESSAMA

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3726

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/807,110 | Applicant(s) CHIU, CHANG-HSUAN | |
| | Examiner Essama Omgba | Art Unit 3726 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☒ Claim(s) 1-6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because in line 2, "an" should read --a--. Correction is required. See MPEP § 608.01(b).
2. The disclosure is objected to because of the following informalities: on page 1, line 9, --is-- should be inserted before "usually", in line 19, it is not clear what "brevity" means in this context; on page 3, lines 3-4, the phrase "on which has no molding line formed" is not clear.

Appropriate correction is required.

Claim Objections

3. Claims 1-6 are objected to because of the following informalities: it is subjected that claim 1 be rewritten as follows in order to conform to US practices. Appropriate correction is required.

-- A manufacturing method for a composite coil spring comprising the following steps:

preparing a mold that includes a first connecting seat, a first cylinder connecting to the first connecting seat, a second cylinder partially movably received in the first cylinder, ~~an~~ a mandrel movably received in the second cylinder and the first cylinder, and a second connecting seat mounted to the second cylinder opposite to the first connecting seat;

spirally winding a coil former around the mandrel: ~~a coil former previously spirally wound on the mandrel~~ to define a coil groove;

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winding composite material pre-preg: ~~a~~ on the mandrel such that the composite material pre-preg ~~being~~ is disposed in the coiled groove defined by the coil former;

~~compressing and heating:~~ inserting the mandrel with the coil former and the composite material pre-preg ~~being inserted~~ into the first cylinder, the coil former and the composite material pre-preg being received between the mandrel and an inner periphery of the first cylinder, moving the second connecting seat and the second cylinder ~~being moved~~ toward the first connecting seat to compress the coil former and the composite material pre-preg when the mold is heated; ~~and~~

~~open~~ opening the mold~~[:]~~ by moving apart the second connecting seat ~~being moved apart~~ from the first connecting seat with the second cylinder and the mandrel to ~~make so as to withdraw~~ the coil former and composite material pre-preg ~~be detached~~ from the first cylinder; and

~~a detaching the mandrel and the coil former:~~ longitudinally drawing out the mandrel ~~longitudinally drawn out~~ from the composite material pre-preg and the coil former ~~due to~~ by pulling the second connecting seat and the second cylinder, detaching the coil former ~~being detached~~ from the hardened composite material pre-preg ~~when the composite material pre-preg is hardened and detached from the mandrel.--~~

Allowable Subject Matter

4. Claims 1-6 would be allowable if rewritten or amended to overcome the objections set forth in this Office action.


Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F (10-7:30) First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Essama Omgba
Primary Examiner
Art Unit 3726